INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We make Indiana a cleaner, healthier place to live.*

*Frank O'Bannon*
Governor

*Lori F. Kaplan*
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

**July 22, 2003**

TO: Interested Parties / Applicant

RE: **OMNI SOURCE 003-17112-00210**
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

# Notice of Decision: Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4 (d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(b) the interest of the person making the request;
(c) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

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Mr. David Frebel
Omni Source
3601 Maumee Avenue
Ft. Wayne, Indiana 46803

**July 22, 2003**

Re: Registered Operation Status,
003-17112-00210

Dear Mr. Frebel:

The application from Omni Source, received on March 31, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following scrap metal recycling plant, located at 3601 Maumee Avenue, Ft. Wayne, Indiana 46803, is classified as registered:

(a) One (1) wet process automobile shredder (identified as S-3), with a maximum throughput rate of seventy-five (75) tons per hour and exhausting to stack GV-1. This unit was constructed in 1992.

(b) Three (3) metal inert gas (MIG) welding stations, with a maximum consumption of five (5) pounds of electrode per hour. This unit was installed in 1996.

(c) Five (5) stick welding stations, with a maximum consumption of thirty (30) pounds of electrode per hour. This unit was installed in 1996.

(d) Two (2) flame cutting station using oxymethane, with a maximum metal cutting rate of twenty-four (24) inches per minute. These units were installed in 1996.

(e) A petroleum dispensing facility, dispensing at a maximum rate of 44 gallons of diesel fuel per day and 66 gallons of unleaded gasoline per day. This unit was constructed in 1987.

(f) One (1) gasoline fuel storage tank, with a capacity of 5,000 gallons. This unit was constructed in 1987.

(g) One (1) diesel fuel storage tank, one (1) hydraulic fluid storage tank, one (1) motor oil tank, one (1) used motor oil tank, each having a capacity equal to 10,000 gallons.

(h) Forty-eight (48) natural gas fired space heaters, with a maximum heat input capacity of 9.7 MMBtu per hour.

(l) Scrap metal storage piles.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations from Manufacturing Processes), the allowable particulate emission rate from the automobile shredder shall not exceed 48.43 pounds per hour when operating at a process weight rate of 150,000 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The automobile shredder shall operate as a wet process at all times, in order to comply with this rule.

This registration is the third approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section**
**Office of Air Quality**
**100 North Senate Avenue**
**P.O. Box 6015**
**Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Sanober Durrani, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7810 to speak directly to Ms. Durrani. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
**Original signed by**
**Phil Perry for**
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ERG/SD

cc: File - Allen County
Allen County Health Department
Air Compliance - Jennifer Dorn
Permit Tracking - Sara Cloe
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

**Registration**
**Annual Notification**

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

| | |
|---|---|
| **Company Name:** | **Omni Source** |
| **Address:** | **3601 Maumee Avenue** |
| **City:** | **Fort Wayne, Indiana 46803** |
| **Authorized individual:** | **David Frebel** |
| **Phone #:** | **(260) 423-8595** |
| **Registration #:** | **R003-17112-00210** |

I hereby certify that Omni Source is still in operation and is in compliance with the requirements of Registration 003-17112-00210.

| |
|---|
| **Name (typed):** |
| **Title:** |
| **Signature:** |
| **Date:** |

# July 22, 2003

# Indiana Department of Environmental Management
# Office of Air Quality

## Technical Support Document (TSD) for a Registration

**Source Background and Description**

| | |
|---|---|
| Source Name: | Omni Source |
| Source Location: | 3601 Maumee Avenue, Fort Wayne, Indiana 46803 |
| County: | Allen |
| SIC Code: | 5093 |
| Operation Permit No.: | 003-17112-00210 |
| Permit Reviewer: | ERG/SD |

The Office of Air Quality (OAQ) has reviewed an application from Omni Source relating to the operation of the scrap metal recycling plant.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) wet process automobile shredder (identified as S-3), with a maximum throughput rate of seventy-five (75) tons per hour and exhausting to stack GV-1. This unit was constructed in 1992.

(b) Three (3) metal inert gas (MIG) welding stations, with a maximum consumption of five (5) pounds of electrode per hour. This unit was installed in 1996.

(c) Five (5) stick welding stations, with a maximum consumption of thirty (30) pounds of electrode per hour. This unit was installed in 1996.

(d) Two (2) flame cutting station using oxymethane, with a maximum metal cutting rate of twenty-four (24) inches per minute. These units were installed in 1996.

(e) A petroleum dispensing facility, dispensing at a maximum rate of 44 gallons of diesel fuel per day and 66 gallons of unleaded gasoline per day. This unit was constructed in 1987.

(f) One (1) gasoline fuel storage tank, with a capacity of 5,000 gallons. This unit was constructed in 1987.

(g) One (1) diesel fuel storage tank, one (1) hydraulic fluid storage tank, one (1) motor oil tank, one (1) used motor oil tank, each having a capacity equal to 10,000 gallons.

(h) Forty-eight (48) natural gas fired space heaters, with a maximum heat input capacity of 9.7 MMBtu per hour.

(i) Scrap metal storage piles

The following equipment has been removed from the source:

(j) Two (2) natural has fired shredder engines (identified as S-1 and S-2), each with a maximum heat input capacity of 13.4 MMBtu per hour and exhausting to stack S-1 and S-2.

**Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

**New Emission Units and Pollution Control Equipment Receiving Prior Approval**

There are no new construction activities included in this permit.

**Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

(a) F003-7704-00210, issued on September 29, 1997; and

(b) E003-3710-00210, issued on June 8, 1994.

All conditions from previous approvals were incorporated into this permit except the following:

(a) F003-7704-00210, issued on September 29, 1997.

Condition D.2.1, Oxides of Nitrogen [326 IAC 2-8]: Pursuant to 326 IAC 2-8 (FESOP), the input of natural gas to the shredder engines shall be limited to 6.54 million cubic feet per month. This limitation is equivalent to a potential to emit of 99 tons of NOx per 365 consecutive day period. Compliance with this limit makes 326 IAC (Part 70) not applicable.

Reason not incorporated: On September 28, 1998, the source submitted a letter stating the removal of the two shredder engines (identified as S-1 and S-2) from the source. The revised potential to emit NOx calculations, as shown in Appendix A, is equal to 4.25 tons per year. The potential to emit of all other criteria pollutants remain below major source levels. Therefore Condition D.2.1 is not applicable.

Omni Source Corporation consists of three (3) plants:

(a) Plant 1 is located at 3600 Maumee Avenue, Fort Wayne, Indiana 46803;

(b) Plant 2 is located at 1145 Fairview, Fort Wayne, Indiana 46803; and

(c) Plant 3 is located at 2511 Taylor Street, Fort Wayne, Indiana 46802

The distance between plant 1 and plant 2 is approximately 0.5 miles and are located in contiguous properties; the distance between plant 1 and plant 3 is 4.5 miles; and the distance between plant 2 and plant 3 is 4.2 miles. All three (3) plants have the same SIC codes and are owned by one (1) company. Plant 1 received approximately three (3) percent of the ferrous scrap from either of the plants for processing. IDEM, OAQ, made a determination (dated July 3, 2003) that identifies the three (3) plants as separate sources because there is no support facility relationship between the three (3) plants.

**Enforcement Issue**

(a) IDEM is aware that equipment has been operated prior to receipt of the proper permit. The source applied for the termination of its FESOP permit F003-7704-00210 in September 1998 because the removal of two (2) natural gas fired shredder engines reduced the source's potential emissions to below major source levels but the source failed to get the remaining emissions units registered.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the operation permit rules.

**Recommendation**

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 31, 2003, with additional information received on May 12, 2003, May 27, 2003, and June 30, 2003.

**Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5).

**Potential To Emit of Source or Revision Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

| Pollutant | Potential To Emit (tons/year) |
|---|---|
| PM | 16.8 |
| PM10 | 16.8 |
| $SO_2$ | 0.03 |
| VOC | 0.79 |
| CO | 3.57 |
| $NO_x$ | 4.25 |

| HAP's | Potential To Emit (tons/year) |
|---|---|
| Benzene | 8.92 E-05 |
| Dichlorobenzene | 5.10 E-05 |
| Formaldehyde | 3.19 E-03 |
| Hexane | 7.65 E-02 |
| Toluene | 1.44 E-04 |

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of criteria pollutants is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM and PM10 pollutants are greater than levels listed in 326 IAC 2-1.1-3(d)(1), therefore the source is subject to the provisions of 326 IAC 2-5.5.1. A Registration will be issued.

(d) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

**County Attainment Status**

The source is located in Allen County.

| Pollutant | Status |
|---|---|
| PM10 | Attainment |
| $SO_2$ | Attainment |
| $NO_2$ | Attainment |
| Ozone | Attainment |
| CO | Attainment |
| Lead | Attainment |

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Allen County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

**Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

| Pollutant | Emissions (ton/year) |
|---|---|
| PM | 16.8 |
| PM10 | 16.8 |
| $SO_2$ | 0.03 |
| VOC | 0.79 |
| CO | 3.57 |
| $NO_x$ | 4.25 |

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) These emissions were based on revised potential to emit calculations (see Appendix A).

**Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on the revised potential to emit calculations (see Appendix A).

**Federal Rule Applicability**

(a) One (1) diesel fuel storage tank, one (1) gasoline storage tank, one (1) hydraulic fluid storage tank, one (1) motor oil storage tank, and one (1) used motor oil storage tank are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because each tank's capacity is less than 40 cubic meters (10,567 gallons).

There are no other New Source Performance Standards (326 IAC 12) and 40 CFR part 60 applicable to this facility.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

**State Rule Applicability - Entire Source**

326 IAC 2-2 (Prevention of Significant Deterioration)

Omni Source's scrap metal recycling plant located at 3601Maumee Avenue, Fort Wayne, was a minor source under PSD when it was constructed in 1994 and is not in one (1) of the twenty-eight (28) source categories. The source was modified in 2003 to remove two (2) natural gas-fired shredder engines, each with a maximum heat input capacity of 13.4 MMBtu per hour. The potential to emit of each criteria pollutant from the entire source remains less than 250 tons per year. Therefore, this source is not subject to the requirements of 326 IAC 2-2.

326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and the potential to emit of CO, VOC, $NO_x$, PM10, or $SO_2$ is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants (HAPs)

The operation of scrap metal recycling plant will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

**State Rule Applicability - Petroleum Dispensing Facility, Storage Tanks**

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

The petroleum dispensing facility does not have potential VOC emissions equal to or greater than twenty five (25) tons per year, therefore this source is not subject to the provisions of 326 IAC 8-1-6.

326 IAC 8-4-6 (Gasoline Dispensing Facilities)

This source is not subject to the provisions of 326 IAC 8-4-6 (Gasoline Dispensing Facility) because the source dispenses less than 10,000 gallons of gasoline per month and was existing prior to July 1, 1989.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

This source is not subject to the requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities) because each tank's storage capacity is less than 39,000 gallons.

**State Rule Applicability - Automobile Shredder**

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to F003-7704-00210, issued September 29, 1997 and 326 IAC 6-3-2, the allowable particulate emission rate from the automobile shredder shall not exceed 48.43 pounds per hour when operating at a process weight of 75 tons per hour.

The pound per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The automotive shredder shall operate as a wet process at all times, in order to comply with this rule.

**State Rule Applicability - Welding Facility**

326 IAC 6-3 (Particulate Matter Emission Limitations from Manufacturing Processes)

This source is not subject to 326 IAC 6-3-1 (Particulate Matter Emission Limitations from Manufacturing Processes) because the welding facility consumes less than six hundred and twenty-five (625) pounds of rod or wire per day [326 IAC 6-3-1(b)(9)].

**State Rule Applicability - Space Heaters, Scrap Metal Storage Piles**

There are no specifically applicable regulations that apply to these emission units

**Conclusion**

The operation of this scrap metal recycling plant shall be subject to the conditions of the attached proposed Registration 003-17112-00210.

**Appendix A: Emission Calculations**
**Natural Gas Combustion Only**
**MMBTU/HR<100**
**Forty-eight (48) Combustion Units**

**Company Name:** OmniSource
**Address:** 3601 Maumee Avenue, Fort Wayne, Indiana 46803
**Registration:** 003-17112
**Plt ID:** 003-00210
**Reviewer:** ERG/SD
**Date:** May 22, 2003

| Heat Input Capacity MMBtu/hour | | Potential Throughput MMCF/year |
|---|---|---|
| 9.70 | (48 Units Total) | **85.0** |

**Pollutant**

| | PM* | PM10* | $SO_2$ | $NO_x$ | VOC | CO |
|---|---|---|---|---|---|---|
| Emission Factor (lb/MMCF) | 7.6 | 7.6 | 0.6 | 100.0 **see below | 5.5 | 84.0 |
| Potential To Emit (tons/year) | 0.32 | 0.32 | 0.03 | 4.25 | 0.23 | 3.57 |

*PM and PM10 emission factors are filterable and condensible PM and PM10 combined.
**Emission factors for $NO_x$: Uncontrolled = 100, Low $NO_x$ Burner = 50, Low $NO_x$ Burners/Flue gas recirculation = 32
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July, 1998).

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

**METHODOLOGY**

Potential Throughput (MMCF/year) = Heat Input Capacity (MMBtu/hr) * 8760 hours/year * 1 MMCF/1000 MMBtu
Potential To Emit (tons/year) = Potential Throughput (MMCF/year) * Emission Factor (lb/MMCF) * 1 ton//2000 lbs

See next page for HAPs emissions calculations.

**Appendix A: Emission Calculations**
**Natural Gas Combustion Only**
**MMBTU/HR<100**
**Forty-eight (48) Combustion Units**

**Company Name:** OmniSource
**Address:** 3601 Maumee Avenue, Fort Wayne, Indiana 46803
**Registration:** 003-17112
**Plt ID:** 003-00210
**Reviewer:** ERG/SD
**Date:** May 22, 2003

**HAPs - Organics**

| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|---|---|---|---|---|---|
| Emission Factor (lb/MMCF) | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential To Emit (tons/year) | 8.92E-05 | 5.10E-05 | 3.19E-03 | 7.65E-02 | 1.44E-04 |

**HAPs - Metals**

| | Lead | Cadmuim | Chromium | Manganese | Nickel |
|---|---|---|---|---|---|
| Emission Factor (lb/MMCF) | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential To Emit (tons/year) | 2.124E-05 | 4.673E-05 | 5.948E-05 | 1.614E-05 | 8.922E-05 |

Methodology is the same as previous page.
The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1-4.2, 1.4-3 and 1.4-4 (July, 1998).
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations**
**VOC Emissions**
**From Petroleum Dispensing Facility**

**Company Name:** OmniSource
**Address:** 3601 Maumee Avenue, Fort Wayne, Indiana 46803
**Registration:** 003-17112
**Plt ID:** 003-00210
**Reviewer:** ERG/SD
**Date:** May 22, 2003

**Potential To Emit from Filling Operation**

| Material | Max. Throughput (gal/day) | *Emission Factor ($lb/10^3$ gal) | VOC Emissions (lbs/day) | (lbs/year) | PTE VOC (tons/year) |
|---|---|---|---|---|---|
| Diesel No.2 | 44 | 11.5 | 0.506 | 144.7 | 0.22 |
| Unleaded Gasoline | 66 | 11.5 | 0.759 | 217.1 | 0.33 |
| | | | | | 0.55 |

* Emission factor from AP-42, Chapter 5, Table 5.2-7 Splash Filling (January, 1995)

**Methodoloy**
VOC Emissions (lbs/day) = Max. throughput (gallons/day) * Emission rate (lbs/1000 gallons)
VOC emissions (lbs/year) = Max. throughput (gallons/day) * Emission rate (lbs/1000 gallons) * 286 days of operation/year
PTE VOC (tons/year) = Max. throughput (gallons/day) * Emission rate (lbs/1000 gallons) * 286 days of operation/year * 1 year/2860 hours * 8760 hours/year * 1 ton/2000 lbs

**Appendix A: Emission Calculations**
**Particulate and HAPs**
**From Welding Operations**

**Company Name:** OmniSource
**Address:** 3601 Maumee Avenue, Fort Wayne, Indiana 46803
**Registration:** 003-17112
**Plt ID:** 003-00210
**Reviewer:** ERG/SD
**Date:** May 22, 2003

| **PROCESS** WELDING | Number of Stations | Max. electrode consumption per station (lbs/hr) | | * Emission Factor (lb pollutant/lb electrode) | | | | Potential To Emit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | PM=PM10 | Mn | Ni | Cr | PM/PM10 | Mn | Ni | Cr | HAPS |
| | | | | | | | | | | | | |
| Metal Inert Gas (MIG)(steel) | 3 | 5.0 | | 0.0241 | 0.000034 | | 0.00001 | 0.362 | 5.1E-04 | 0E+00 | 0.00015 | 6.6E-04 |
| Stick (E7018 electrode) | 5 | 30.0 | | 0.0211 | 0.0009 | | | 3.165 | 1.4E-01 | 0E+00 | 0 | 1.4E-01 |
| FLAME CUTTING | Number of Stations | Max. Metal Thickness Cut (in.) | Max. Metal Cutting Rate (in./minute) | * Emission Factor (lb pollutant/1000 in. cut, 1" thick) | | | | EMISSIONS (lbs/hr) | | | | HAPS (lbs/hr) |
| | | | | PM=PM10 | Mn | Ni | Cr | PM/PM10 | Mn | Ni | Cr | |
| | | | | | | | | | | | | |
| Oxymethane | 2 | 1 | 24 | 0.0815 | 0.0002 | | 0.0002 | 0.235 | 2.35E-05 | 0.0E+00 | 0.0E+00 | 2.35E-05 |

| | | | | | |
|---|---|---|---|---|---|
| **PTE (lbs/hour) =** | 3.76 | 0.136 | 0.0E+00 | 1.5E-04 | 1.4E-01 |
| **PTE (lbs/day) =** | 90.27 | 3.253 | 0.0E+00 | 3.6E-03 | 3.3E+00 |
| **PTE (tons/year) =** | 16.5 | 0.59 | 0.0E+00 | 6.6E-04 | 5.9E-01 |

Welding and other flame cutting emission factors are from an internal training session document.
Refer to AP-42, Chapter 12.19 for additional emission factors for welding.
*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**METHODOLOGY**
Cutting emissions (lb/hour) = No. of stations * Max. metal thickness(in) * Max. cutting rate (in/min) *60 min/hour* Emission factor (lb pollutant/1,000 in. cut, 1" thick)
Welding emissions (lb/hour) = No. of stations * Max. lbs of electrode used/hour/station * emission factor (lb pollutant/lb of electrode used)
PTE (lbs/day) = PTE (lbs/hour) * 24 hrs/day
PTE (tons/year) = PTE (lb/hour) * 8760 hours/year * 1ton/2000 lbs

**Appendix A: Emission Calculations**
**Summary**

**Company Name:** OmniSource
**Address:** 3601 Maumee Avenue, Fort Wayne, Indiana 46803
**Registration:** 003-17112
**Plt ID:** 003-00210
**Reviewer:** ERG/SD
**Date:** May 22, 2003

**POTENTIAL TO EMIT**

| | PM | PM10 | SO2 | NOx | VOC | CO |
|---|---|---|---|---|---|---|
| Natural Gas Fired Combustion Units | 0.32 | 0.32 | 0.03 | 4.25 | 0.23 | 3.57 |
| Dispensing Facility | | | | | 0.55 | |
| Welding Operation | 16.5 | 16.5 | | | | |
| **SUM** | 16.8 | 16.8 | 0.03 | 4.25 | 0.79 | 3.57 |